



At the 1998 RBL, the robots see back!

AAAI-98 Robot Building Lab with Vision

July 26-27, 1998, Madison, Wisconsin

YOU'VE SEEN THE AAI ROBOT CONTESTS FOR THE LAST SIX YEARS. You've seen the robot building lab (RBL) finals. You've seen the RBL attendees build a fully functional robot in just a couple of days while they learn more and have more fun than anyone could expect. You thought you had seen it all, but you have never seen anything like this because at the 1998 RBL *the robots see back!*

At this year's AAI Robot Building Lab, each kit will come complete with a camera and Cognachrome vision system. Participants in this year's RBL will design, build, and program autonomous mobile robots whose primary sensor modality is color vision.

As in RBL-97, each small group will start with a naked mobility platform, a large array of LEGO® Technic pieces, motors, sensors, computers and software routines. Everyone will be given the task specification. During a series of short tutorials and through hands-on experience you will learn the basics of robot systems, motion control, multi-tasking, and machine vision. This year's RBL will use robot controllers with memory size and processor speeds more than an order of magnitude beyond previous RBLs. When combined with the Cognachrome system this is enough to process video at sixty frames per second!

The RBL will conclude with a robot competition based around a traditional AI task, augmented so that the robots need to compete for resources while demonstrating their speed and agility.

The software and documentation will be distributed to registered participants several weeks in advance. A familiarity with basic AI programming principles and the C language will be assumed at the RBL.

The RBL is your chance to try out your latest ideas on robotics, vision, and agenthood; see if your theories stand up to the physical world. If you have never worked on a robot, now is your chance. Even if you have built robots before, this RBL will have new equipment with new capabilities that will expand your knowledge and robotics skills.

Details

The RBL will take place all day Sunday and Monday July 26 & 27, 1997. Principal instructors will be David P. Miller and Randy Sargent. This lab is being organized for AAI by KISS Institute for Practical Robotics.

For more information, send e-mail to rbl98@kipr.org, or contact, AAI at

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